

ECCO Version 4 Release 2

[<https://dataverse.harvard.edu/dataverse/ECCOv4r2inputs>]

[doi:10.7910/DVN/H2Q1ND]

- This dataset (<http://dx.doi.org/10.7910/DVN/H2Q1ND>) provides the ECCO Version 4 Release 2 miscellaneous inputs:

*.bin *.err *.rms uncertainty fields and climatologies

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- Comments:

- These binary files can be read in Matlab using `read_bin.m` (http://mitgcm.org/viewvc/MITgcm/MITgcm_contrib/gael/matlab_class/gcmfaces_IO/) as part of the `gcmfaces` toolbox (see `gcmfaces.pdf` link provided below). They are also directly readable by the MITgcm when using the LLC90 setup to re-run the ECCO v4 ocean state estimate (see `eccov4.pdf` link provided below).
- 'ECCO Version 4 Release 2' is a global ocean state estimate that covers the period from 1992 to 2011 (Forget et al. 2015, 2016). It was produced on behalf of the ECCO consortium (<http://ecco-group.org/>) with major support provided NASA's Physical Oceanography Program. General documentation of the 'ECCO Version 4 Release 2' dataverse and all included datasets can be found at <https://dx.doi.org/10.7910/DVN/ODM2IQ> (see `README.pdf` in that dataset).
- The formatting, online publishing, and archiving of the ECCO V4 R2 dataverse and datasets have benefited from guidance that was graciously provided by the MIT Libraries Data Management Services (<http://libraries.mit.edu/data-management/>). At time of writing the contents listed above can alternatively be downloaded from ftp://mit.ecco-group.org/ecco_for_las/version_4/release2/.

- References:

- Forget, G., J.-M. Campin, P. Heimbach, C. N. Hill, R. M. Ponte, and C. Wunsch, 2015: ECCO version 4: an integrated framework for non-linear inverse modeling and global ocean state estimation. *Geoscientific Model Development*, 8, 3071-3104, <http://dx.doi.org/10.5194/gmd-8-3071-2015>
- Forget, G., J.-M. Campin, P. Heimbach, C. N. Hill, R. M. Ponte, and C. Wunsch, 2016: ECCO Version 4: Second Release, <http://hdl.handle.net/1721.1/102062>

- Software:

- The ECCO V4 R2 files were produced using the 'checkpoint64u' versions of the general circulation model (MITgcm and ECCO v4 settings) and Matlab analysis toolboxes (`gcmfaces` and `MITprof`). These software versions are available at http://mitgcm.org/download/other_checkpoints/ and http://mit.ecco-group.org/opensap/ecco_for_las/version_4/checkpoints/contents.html
- The up to date software documentations are available at http://mitgcm.org/public/r2_manual/latest/online_documents/manual.pdf, http://mitgcm.org/viewvc/*checkout*/MITgcm/MITgcm_contrib/gael/verification/eccov4.pdf, and http://mitgcm.org/viewvc/*checkout*/MITgcm/MITgcm_contrib/gael/matlab_class/gcmfaces.pdf

- Contact Us:

- questions regarding the ECCO model set-up, grid, software, or files should be addressed to either `ecco-support@mit.edu` (please subscribe via <http://mailman.mit.edu/mailman/listinfo/ecco-support>) or `mitgcm-support@mitgcm.org` more generally (please subscribe via <http://mitgcm.org/mailman/listinfo/mitgcm-support>).

- README file revision history:

- remove old version of `GRACE_jpl_rl05m_err` [Gael Forget] [2016/12/18]
- README file overhaul for use within dataverse [Gael Forget] [2016/08/03]